

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,945	09/20/2001	Toru Kamiwada	1405.1049	9962
21171 STAAS & HA	7590 07/26/2007 LSEY LLP		EXAMINER	
SUITE 700			DINH, MINH	
1201 NEW YO WASHINGTO	ORK AVENUE, N.W. ON. DC 20005		. ART UNIT PAPER NUMBER	
			2132	
	,			
			MAIL DATE	DELIVERY MODE
	•		07/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office A.A. a. Communication	09/955,945	KAMIWADA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Minh Dinh	2132			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	L. nely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status	•				
Responsive to communication(s) filed on 11 Ma     This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-9 and 11-25 is/are pending in the ap 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-9 and 11-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 20 September 2001 is/a Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examiner	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te			

Art Unit: 2132

#### **DETAILED ACTION**

## Response to Amendment

1. This action is in response to the RCE/amendment filed 5/11/07.

Claims 1, 11, 18 and 23-24 have been amended; claim 25 has been added.

#### Response to Arguments

2. Applicant's arguments filed 5/11/07 with respect to the rejection of claim 1 under 35 USC 102(b) as anticipated by Holmes (5,875,395) have been fully considered but they are not persuasive. Applicant argues that Holmes, alone or in combination, does not teach: 1) a single operating terminal transmitting instruction signals relating to operations of one or more of said plurality of different types of devices, and 2) where the transmission is directly to said plurality of devices, and 3) wherein both the terminal and the plurality of devices are on the home network. However, the of scope of claim 1 is not limited by the amended language that suggests optional but does not require steps to be performed, i.e., a single operating terminal capable of transmission of instructions signals directly to each of said plurality of devices (lines 3-4), because the specification discloses that the single operating terminal sends instruction information directly to each device **or** to the home server (page 19, lines 10-12). In addition, the amended language in the last two lines of claim 1 "directly received from

Art Unit: 2132

said operating terminal" fails to indicate that the receiving entity is one of the devices. Since all of the steps recited in claim 1 are performed by the home server, it is interpreted that the home server receives the instruction signals directly from the single operating terminal. As such, Holmes reference still reads on claim 1.

### Claim Objections

- 3. Claims 1 and 25 are objected to because of the following informalities: "signal instructions" (next to the last line) should be changed to "instruction signals". Appropriate correction is required.
- 4. Claim 25 is objected to because of the following informalities: "over home network" (2<sup>nd</sup> line) should be changed to "over a home network".

  Appropriate correction is required.

# Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains

Art Unit: 2132

subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 25 recites "a handset for transmitting capable of transmitting of instruction signals to a home server to control each of said plurality of **devices positioned out of the home**" (lines 4-6). However, the specification discloses that the handset, not the devices, is outside the house (page 27, line 21 – page 28, line 22). The feature is considered new matter. For prior art rejection purpose, the feature is interpreted as "a handset **positioned out of the home** for transmitting capable of transmitting of instruction signals to a home server to control each of said plurality of devices".

# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 9, 11, 22-23 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmes (5,875,395).

Art Unit: 2132

Regarding claim 1, which is exemplary of claims 9, 11 and 23, Holmes discloses an access restriction method for a device control system comprising a device control server interconnected over a CEBus home network with a plurality of different types of devices within a home (fig. 1, elements 12, 26 and corresponding text; col. 3, lines 38-50), and an operating terminal capable of transmission of instruction signals to said devices, the instruction signals relating to operation of plurality of devices connected to the CEBus home network (fig. 1, elements 10, 24), said method comprising: accepting instruction information including said operating terminal identifier and said instruction signals relating to operation of said plurality of devices (fig. 5, step 52); determining said operating terminal access right based on said operating terminal identifier included in said instruction information (fig. 5, step 54); and controlling said plurality of devices based on said operating terminal access right and said signal instructions, directly received from said operating terminal, relating to said plurality of different types of devices (fig. 5, steps 58-66). Holmes does not explicitly disclose the step of accepting registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right for accessing the one or more devices. However, this feature is deemed to be inherent to the Holmes method as lines 1-17 of column 3 show that the device control server uses

Art Unit: 2132

stored information to authenticate and authorize the operating terminal. The Holmes method would be inoperative if the server did not accept registration of terminal information for associating a unique identifier established for said operating terminal with said operating terminal access right.

Regarding claim 22, Holmes teaches that the operating terminal controls said one or more devices by sending out commands to the one or more devices; the teaching meets the limitation of the operating terminal directly controlling said one or more devices with signals transmitted from said terminal.

Claim 25 differs from claim 1 in that it recites, in addition to the single operating terminal, a handset positioned out of the home for transmitting capable of transmitting of instruction signals to a home server to control each of said plurality of devices (lines 4-6). Holmes's single operating terminal is also a handset (i.e., a mobile station).

# Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 7

Art Unit: 2132

10. Claims 2-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Buffam (6,185,316). Holmes discloses using a challenge-response scheme based on symmetric-key cryptography between the server and the terminal (col. 1, lines 50-67). Holmes does not teach using a challengeresponse scheme based on a public-key cryptography. Buffam discloses using a challenge-response scheme based on a public-key cryptography and that the public key is part of the identity of an entity and should be made known to other entities (col. 5, lines 45-54; col. 6, lines 18-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to use a challenge-response scheme based on a public-key cryptography, as taught by Buffam. The motivation for doing so would have been that no secret information had to be shared by the entities involved in the exchange. Accordingly, the server receives the public key of the terminal as part of the registration information.

11. Claims 4-6 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Sizer, II et al (6,021,324). Holmes discloses that the server verifies the terminal's access right when receiving instruction information

Page 8

Art Unit: 2132

from the terminal. Holmes does not disclose that the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented. Sizer discloses a system for controlling appliances within a home including a control server, the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented (col. 2, lines 30-42; col. 6, lines 21-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method such that the server is connected to an external network from which electronic information is acquired and that the information is stored at the server and then presented, as taught by Sizer. The motivation for doing so would have been that electronic content could be downloaded from a cable company for use at the premises. Accordingly, access to the external server and the electronic information is control by access right of the terminal.

12. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Muhonen (6,751,472). Holmes does not disclose that the access right of the operating terminal is determined based on whether the operating terminal is located inside or outside the house. Muhonen discloses that

Art Unit: 2132

different access rights are applied depending on the location of a mobile terminal whether it is located inside a house (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method such that the access right of the operating terminal is determined based on whether the operating terminal is located inside or outside the house, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

Page 9

13. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claims 1 and 11 above, and further in view of Dugan (6,779,030). Holmes discloses authenticating the terminal. Holmes does not disclose authenticating the user of the terminal. Dugan discloses authenticating the terminal and authenticating the user of the terminal using a user's information (col. 67, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to also authenticate a user of the terminal using the user's information, as taught by Dugan. The motivation for doing so would have been that only authorized users are allowed to operate the terminal. Accordingly, the server receives the user's registration information as part of the registration information.

Art Unit: 2132

14. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa (6,148,404) and White et al. (6,353,413).

Holmes discloses an operating terminal, in a device control system having a device control server interconnected over a home network with one or more devices within the home network, capable of transmitting instruction signals relating to operations of said one or more devices to said one or more devices (fig. 1, elements 10, 12, 26), comprising: identifier storage means storing a unique identifier (col. 1, lines 56-58); input acceptance means for accepting input of instructions relating to operation of said one or more devices (fig. 1, element 10); instruction information generation means for generating instruction information based on inputted instructions accepted by said input acceptance means and on an identifier stored in said identifier storage means; and instruction information transmission means for transmission of instruction information generated by said instruction information generation means (fig. 5, step 52-58). Holmes further discloses using a challenge-response scheme based on symmetrickey cryptography between the server and the operating terminal (col. 1, lines 50-67).

Holmes does not teach using a challenge-response scheme based on a public-key cryptography. Yatsukawa discloses using a challenge-response

Art Unit: 2132

scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication (figures 13-14; col. 20, lines 39-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to use a challenge-response scheme based on a public-key cryptography, in which a terminal first registers its identifier and public key with a server, encrypts a predetermined value with its private key and sends the encrypted value to the server for authentication, as taught by Yatsukawa. The use of public-key cryptography is indispensable to satisfy all conditions of a digital signature (col. 3, line 66 – col. 4, line 11).

Page 11

Holmes does not disclose that the terminal, i.e., a mobile phone, can transmit instruction information directly to the home devices. White disclose a terminal being both a mobile phone and a remote control unit transmitting instruction information directly to home devices (Abstract; figures 1-2; col. 3, lines 23-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Holmes's terminal such that it transmits instruction information directly to the home devices, as taught by White. The motivation for doing so would have been to reduce the number of portable devices in a home (col. 1, lines 46-52).

Art Unit: 2132

15. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa as applied to claim 18 above, and further in view of Muhonen. Holmes discloses generating instruction information based on said inputted instruction and said identifier (fig. 5). Holmes does not disclose using location information. Muhonen discloses that different services are offered depending on the location of a mobile terminal (col. 5, lines 33-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes terminal to use its location information, as taught by Muhonen. The motivation for doing so would have been to extend the capabilities of the operator to offer different services depending on the location of the subscriber.

Page 12

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes in view of Yatsukawa as applied to claim 18 above, and further in view of Dugan. Holmes discloses using the terminal identifier to authenticate the terminal. Holmes does not disclose using a user's information to authenticate the user of the terminal. Dugan discloses authenticating the terminal and authenticating the user of the terminal using a user's information (col. 67, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes method to also authenticate a user of the terminal using the

Art Unit: 2132

user's information, as taught by Dugan. The motivation for doing so would have been that only authorized users are allowed to operate the terminal.

17. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes as applied to claim 22 above, and further in view of Davidson ("CEBus: A New Standard in Home Automation"). Holmes discloses that one of the devices is a cooling system (col. 3, lines 24-29). Holmes does not disclose that the devices include a TV set. Davidson discloses that devices in a home automation system include a TV set (see CEBUS, pages 40-41; A CEBus Demonstration, pages 50-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Holmes system to such that it includes a TV set, as taught by Davidson. The motivation for doing so would have been to provide remote control of the TV set together with other household devices using a single standard.

#### Conclusion

- 18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - U.S. Patent No. 6,901,241 to Bjorndahl

Art Unit: 2132

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2132

Page 15

/MD/ Minh Dinh Examiner Art Unit 2132

7/22/07

GILBERTO BARRON JA SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100